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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/309,130	05/10/1999	MICHAEL E. RAKAUSKAS	28572/32531A	7131

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ROPES & GRAY

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EXAMINER

KRUER, KEVIN R

ART UNIT

PAPER NUMBER

1773

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/309,130

Applicant(s)

RAKAUSKAS

Examiner

Kevin R Krueer

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 17-25 and 37-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 17-25 and 37-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Objections***

1. Claim 18 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 18 states that the saturating resin comprises melamine. Claim 17, from which claim 18 depends, already states that the saturating resin comprises melamine.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 17, 18, 24, 37-42 and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Wark (US 3,294,622).

Wark teaches a laminate comprising a translucent overlay sheet impregnated with melamine formaldehyde resin, a print sheet impregnated with modified melamine formaldehyde resin, a kraft sheet impregnated with a phenol formaldehyde resin, a MASONITE core, a standard core sheet of phenol formaldehyde resin, and a melamine impregnated balancing sheet (see Figure 5). The overlay and the print sheet each comprise alpha cellulose impregnated papers (col 6, 30+). The melamine impregnated

balancing sheet also comprises alpha cellulose paper (Col 6, lines 30+). MASONITE is a fiberboard material, and is herein understood to read on the fiberboard embodiments of claims 24 and 48.

The print sheet taught in Wark is understood to read on the claimed saturated alpha cellulose sheet layer, and the overlay is understood to read on the claimed veneer. The examiner notes that the claimed veneer is taught to read on "any wood-like material" (page 7 of the specification) such as resin-impregnated papers.

With respect to claim 37 and the claims that depend therefrom, Wark does not teach the claimed method limitations. However, the courts have held that the method of making a product does not patentably distinguish the claimed product from a product taught in the prior art unless it can be shown that the method of making the product inherently results in a materially different product. In the present application, the examiner takes the position that the laminate taught in Wark reads on the claimed laminate because the laminate of Wark comprises the same layers in the same relative order as the claimed laminate.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 17-20, 23, 37-44 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClain (US 1,299,747) in view of Petrik et al (US 3,888,728).

McClain teaches a wood laminate comprising two sheets of wood bond together by an impregnated sheet of paper (lines 64-74). Herein, one sheet is interpreted to read on the claimed substrate and the other sheet is interpreted to read on the claimed veneer.

McClain does not teach that the impregnated paper sheet should comprise the claimed melamine-impregnated alpha cellulose sheet. However, Petrik teaches a aminoplast resin saturated carrier sheet (abstract) useful for laminated materials together (col 1, lines 26+), especially wood materials (col 1, line 10). The carrier sheet comprises an alpha cellulose sheet (see examples) impregnated with a melamine condensate, urea condensate, or mixtures thereof (col 1, lines 17+). The aminoplast additionally contains 0.05-3% ethylene glycol or propylene glycol fatty acid esters (col 2, lines 1+). The alpha-cellulose sheet has a weight per unit area of  $80\text{g/m}^2$  (col 4, line 5) which equates to approximately 49lb/ream. The impregnated sheets can be dried and manufactured more rapidly than conventional carrier sheets (col 2, lines 15+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the aminoplast saturated carrier sheets taught in Petrik in place of the resin impregnated papers taught in McClain. The motivation for doing so would have been to decrease drying times and increase the speed at which the laminate can be processed.

McClain also does not teach that the laminate may comprise an aminoplast-impregnated carrier sheet on the surface of the substrate opposite the wood veneer. However, Petrik teaches that the aminoplast resin impregnated carrier sheet may be applied to the surface of a wood material in order to improve the surface of said material (col 1, lines 26+). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the aminoplast impregnated carrier sheet to the surface of the substrate opposite the veneer. The motivation for doing so would have been to improve the laminate's surface properties.

The carrier sheet taught in McClain is interpreted to read on the limitation of claim 19 wherein the 99.95-97wt% aminoplast comprises melamine resin and 0.05-3% ethylene glycol or propylene glycol fatty acid ester. Herein, 99.95-97wt% is understood to read on "about 98wt%" melamine.

The carrier sheet taught in McClain is interpreted to read on the limitation of claim 20 wherein the aminoplast comprises a blend of urea and melamine condensates (col 1, line 20).

With respect to claim 37 and the claims that depend therefrom, McClain in view of Petrik does not teach the claimed method limitations. However, the courts have held that the method of making a product does not patentably distinguish the claimed product from a product taught in the prior art unless it can be shown that the method of making the product inherently results in a materially different product. In the present application, the examiner takes the position that the laminate taught by McClain in view

of Petrik reads on the claimed laminate because the laminate comprises the same layers in the same relative order as the claimed laminate.

6. Claims 22 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClain (US 1,299,747) in view of Petrik et al (US 3,888,728), as applied to claims 17-20, 23, 37-44 and 47 above, and further in view of Guyette (US 5,425,986).

McClain in view of Petrik is relied upon as above, but neither reference teaches that the resin should comprise about 45-65wt.% of the resin-saturated sheet. However, Guyette teaches that the resin in the resin impregnated intermediate sheet should comprise 5 to 75 percent by weight of the resin impregnated intermediate sheet (col 3, lines 45+). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a resin-saturated sheet comprising 5-75wt.% resin because Guyette teaches that sheets comprising 5-75wt% resin exhibit sufficient adhesion to the surrounding substrates when utilized as intermediate layers in wood composite laminates.

7. Claims 25 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClain (US 1,299,747) in view of Petrik et al (US 3,888,728), as applied to claims 17-20, 23, 37-44 and 47 above, and further in view of Carter et al (US 5,704,134) or Sunol (US 4,992,308).

McClain in view of Petrik is relied upon as above, but neither teaches the claimed moisture content of the veneer. However, Carter teaches that lumber is typically dried to an equilibrium moisture content of 6-15% (col 1, lines 10+). Similarly, Sunol teaches that wood will equilibrate to contain 4-15% moisture when left to air dry at atmospheric pressure (col 7, lines 3+). Thus, it would have been obvious to one of ordinary skill in

the art at the time the invention was made to utilize wood components comprising the claimed amount of moisture. The motivation for doing so would have been because wood typically has a moisture content at atmospheric conditions of around 4-15%. Thus, wood with said moisture content would be more dimensionally stable.

8. Claims 21 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over McClain (US 1,299,747) in view of Petrik et al (US 3,888,728), as applied to claims 17-20, 23, 37-44 and 47 above, and further in view of Higuchi et al (US 4,307,206).

McClain in view of Petrik is relied upon as above. Specifically, Petrik teaches that urea/melamine blends may be utilized in the carrier sheets, but does not teach the relative amounts of each component. However, Higuchi teaches that urea and melamine condensates have been traditionally used as adhesives in the wood industry (col 1, lines 5+). Ureas are relatively inexpensive and have superior operability, whereas melamine has superior water resistance. The courts have held that when the general conditions of a claim are known in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation (see MPEP 2141). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the relative amounts of urea and melamine utilized in the carrier sheets taught in Petrik. The motivation for doing so would have been to optimize the carrier sheets water resistance, cost, and operability.



### **Response to Arguments**

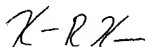
Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on 571-272-1516. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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